



WORLD-CLASS EDUCATION: MATH & SCIENCE

The best way to grow our economy and secure a bright future for all students is to make smart, strategic, responsible and accountable investments in math and science. Governor Gregoire knows that our students' math and science knowledge must improve to give them the competitive advantage they need to get good jobs in the new economy. Her budget includes investments in math and science, such as reducing class size, to help teachers teach and help students learn.

Recent scores on math assessments have shown that our students deserve better training. In addition to working to correct specific deficiencies, Governor Gregoire is working to change the entire education system to include world-class learning opportunities and system-wide accountability.



The top jobs in the new economy require an understanding of math and science and our education system must prepare students to meet high standards. Jobs in the skilled trades from construction to automotive repair require sophisticated math and science skills, and employers in fields from health care to high-tech are demanding more workers with science, engineering, math and logic skills.

The changes that Governor Gregoire proposes will support programs that work and each component enhances the power of every other component. While these changes are significant, government alone cannot fix the education system. All of us – students, teachers, parents, businesses and communities – must make a commitment to support major changes in education.

REDUCING CLASS SIZE

Governor Gregoire knows that students learn math and science better in smaller, less disruptive classrooms. Governor Gregoire will now invest in smaller class sizes so that students get personal attention and small group instruction. In smaller classes, students will have more opportunities to ask questions and gain a deeper understanding of the material. For the first time in Washington history, we will meet the nationally recommended standard of 1 teacher for every 25 students.

MATH & SCIENCE TEACHERS

This is the first time Washington has ever targeted such a comprehensive effort to improve professional development for math and science teachers. Governor Gregoire is concerned that nearly 45 percent of math teachers do not have a math degree and she has a plan to make the changes our students need. To meet the need for more qualified teachers, Governor Gregoire will recruit 750 additional math and science teachers, and invest in teacher training so that teachers can expand their knowledge and strategies for teaching these subjects. Loan incentive programs will encourage more people to become math and science teachers. Instructional coaches will demonstrate proven teaching strategies and connect math and science to other subjects. Teachers who achieve certification through the National Board for Professional Teaching Standards will be recognized with a bonus for teaching in schools with students needing the most help, and an additional bonus if they are certified in math or science. Governor Gregoire is also investing in more math and science training for early childhood educators, so that we can nurture the interest that naturally flows from young children counting blocks or mixing colors.

INTERNATIONAL STANDARDS, CURRICULUM & TESTING

There are dozens of different math curricula being taught in our 296 school districts. Governor Gregoire understands that many students are left behind when they transfer between schools, and that some math curricula do not meet international standards. We need to change the system, fix the curriculum and rework the WASL. Governor Gregoire will invest in standards that reflect internationally recognized math content, and identify no more than three curricula that are aligned with those international standards. We will insist that the 10th grade WASL reflect the new curricula and evaluate students on their ability to compete with students in other states and nations. We will also identify international science standards and curricula. A single college readiness test will help students determine if they are ready for college level math and science courses, and, by testing in the 11th grade, will give them the opportunity to better prepare for college if they are not yet ready. This high-quality, rigorous, consistent math and science program will ensure that we teach to an internationally recognized curriculum, test to the concepts that we teach, and prepare students to succeed.

HANDS-ON SCIENCE LEARNING

Students learn science better through hands-on instruction. Governor Gregoire will expand the Leadership and Assistance for Science Education Reform (LASER) program, to bring hands-on science instruction into 1,000 additional K-8 classrooms across the state. LASER is public-private partnership that provides complete toolkits for science projects, with teacher training, research-based models for inquisitive learning and community support.

INTEGRATED MATH, SCIENCE, TECHNOLOGY & ENGINEERING

Students with first-hand experience using math and science become tomorrow's engineers, designers, computer programmers, builders and scientists. Governor Gregoire's investment will attract private sector resources to support the materials, software and hardware students use to explore real world applications of math and science.

HELP FOR STRUGGLING STUDENTS

Too many students have failed to meet graduation standards for math and Governor Gregoire knows that it is the education system that needs to change. Concerned about the high school drop-out rate, she is instituting a plan to get high school students the special help they need to finish school. Governor Gregoire is investing in intensive learning options, test preparation and tutoring to help students who have been unsuccessful on the 10th grade WASL test in math. Additional mentoring and tutoring at after-school programs, such as the Boys and Girls Clubs, will support the math learning taking place in the student's classroom.

MATH & SCIENCE SCHOLARSHIPS

Governor Gregoire is making math and science careers more accessible for Washington students. The GET Ready for Math and Science Scholars program will provide a powerful incentive for middle and high school students to perform well in these subjects and pursue related degrees in college. The College Success Foundation will find the funding to match the state's investment dollar-for-dollar, for a full \$28 million in scholarships to eligible students. As more of our students complete math- and science-related degree programs, more employers will be able to find qualified applicants – right here in Washington – for jobs requiring math and science skills.

MATH & SCIENCE: REAL CHANGE FOR WASHINGTON STUDENTS

This is the first comprehensive math and science policy reform with significant funding in Washington history.

Reducing Class Size	\$90.2 million
Math & Science Teachers	\$61.9 million
Hands-On Science Learning	\$12.1 million
Integrated Math, Science, Technology & Engineering	\$1.3 million
Help for Struggling Students	\$12.5 million
International Standards, Curriculum & Testing	\$4.9 million
Math & Science Scholarships	\$14.0 million
Total	\$196.9 million